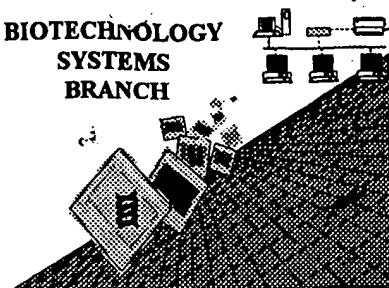


## **RAW SEQUENCE LISTING** **ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/812,485

Source: OIPE

Date Processed by STIC: 4/5/2001

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/812,485

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1        Wrapped Nucleics      The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2        Wrapped Aminos      The amino acid number/text at the end of each line "wrapped " down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3        Incorrect Line Length      The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4        Misaligned Amino Acid      The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs  
Numbering      between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5        Non-ASCII      This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6        Variable Length      Sequence(s)        contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and  
indicate in the (ix) feature section that some may be missing.
- 7        PatentIn ver. 2.0 "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid  
sequence(s)                     . Normally, PatentIn would automatically generate this section from the  
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section  
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>  
sections for Artificial or Unknown sequences.
- 8        Skipped Sequences      Sequence(s)        missing. If intentional, please use the following format for each skipped sequence:  
(OLD RULES)      (2) INFORMATION FOR SEQ ID NO:X:  
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9        Skipped Sequences      Sequence(s)        missing. If intentional, please use the following format for each skipped sequence.  
(NEW RULES)      <210> sequence id number  
                                 <400> sequence id number  
                                 000
- 10        Use of n's or Xaa's      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11        Use of "Artificial"      Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.  
(NEW RULES)      Valid response is Artificial Sequence.
- 12        Use of <220>Feature      Sequence(s)                      are missing the <220>Feature and associated headings.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"  
                                 Please explain source of genetic material in <220> to <223> section.  
                                 (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13        PatentIn ver. 2.0 "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted  
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).  
Instead, please use "File Manager" or any other means to copy file to floppy disk.

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/812,485

DATE: 04/05/2001  
TIME: 12:12:58

Input Set : A:\seqlist.txt  
Output Set: N:\CRF3\04052001\I812485.raw

Does Not Comply  
Corrected Diskette Needed

pp 1-5

4 <110> APPLICANT: Kumagai, Yoshinari  
5 Blacher, Russel  
6 Yoneda, Toshiyuki  
8 <120> TITLE OF INVENTION: "Integrin Binding Motif Containing  
9 Peptides and Methods of Treating Skeletal Diseases"  
12 <130> FILE REFERENCE: BEAR-006CIP  
14 <140> CURRENT APPLICATION NUMBER: US/09/812,485  
15 <141> CURRENT FILING DATE: 2001-03-19  
17 <150> PRIOR APPLICATION NUMBER: 09/641,034  
18 <151> PRIOR FILING DATE: 2000-08-16  
20 <160> NUMBER OF SEQ ID NOS: 50  
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
24 <210> SEQ ID NO: 1  
25 <211> LENGTH: 97  
26 <212> TYPE: PRT  
27 <213> ORGANISM: peptide  
29 <400> SEQUENCE: 1  
30 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
31 1 5 10 15  
32 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys  
33 20 25 30  
34 Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu Arg  
35 35 40 45  
36 Gly Asp Asn Asp Ile Ser Pro Phe Ser Gly Asp Gly Gln Pro Phe Lys  
37 50 55 60  
38 Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Pro Asp Leu Glu Gly Lys  
39 65 70 75 80  
40 Asp Ile Gln Thr Gly Phe Ala Gly Pro Ser Glu Ala Glu Ser Thr His  
41 85 90 95  
42 Leu  
45 <210> SEQ ID NO: 2  
46 <211> LENGTH: 47  
47 <212> TYPE: PRT  
48 <213> ORGANISM: peptide  
50 <400> SEQUENCE: 2  
51 Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg Ile Gln His  
52 1 5 10 15  
53 Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys Ile Pro Ser  
54 20 25 30  
55 Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu Arg Gly Asp  
56 35 40 45  
58 <210> SEQ ID NO: 3  
59 <211> LENGTH: 47  
60 <212> TYPE: PRT  
61 <213> ORGANISM: peptide  
63 <400> SEQUENCE: 3  
64 Arg Gly Asp Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg

(global error)

invalid - per 1.823 of sequence rules, the only valid  
<213> responses are: Unknown,

Artificial Sequence,  
or Scientific name  
(Genus/species)

(see circled portion  
of item 12 on Error  
Summary Sheet)

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/812,485

DATE: 04/05/2001

TIME: 12:12:58

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04052001\I812485.raw

```
65 1 5 10 15
66 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
67 20 25 30
68 Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu
69 35 40 45
71 <210> SEQ ID NO: 4
72 <211> LENGTH: 47
73 <212> TYPE: PRT
74 <213> ORGANISM: peptide
76 <400> SEQUENCE: 4
77 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
78 1 5 10 15
79 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
80 20 25 30
81 Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Arg Gly Asp
82 35 40 45
84 <210> SEQ ID NO: 5
85 <211> LENGTH: 44
86 <212> TYPE: PRT
87 <213> ORGANISM: peptide
89 <400> SEQUENCE: 5
90 Arg Gly Asp Ser Pro Val Lys Ser Lys Ser Thr His Arg Ile Gln His
91 1 5 10 15
92 Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys Ile Pro Ser
93 20 25 30
94 Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu
95 35 40
97 <210> SEQ ID NO: 6
98 <211> LENGTH: 44
99 <212> TYPE: PRT
100 <213> ORGANISM: peptide
102 <400> SEQUENCE: 6
103 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
104 1 5 10 15
105 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
106 20 25 30
107 Ile Pro Ser Asp Phe Glu Gly Ser Gly Arg Gly Asp
108 35 40
110 <210> SEQ ID NO: 7
111 <211> LENGTH: 37
112 <212> TYPE: PRT
113 <213> ORGANISM: peptide
115 <400> SEQUENCE: 7
116 Arg Gly Asp Thr His Arg Ile Gln His Asn Ile Asp Tyr Leu Lys His
117 1 5 10 15
118 Leu Ser Lys Val Lys Lys Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr
119 20 25 30
120 Thr Asp Leu Gln Glu
121 35
```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/812,485

DATE: 04/05/2001

TIME: 12:12:58

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04052001\I812485.raw

123 <210> SEQ ID NO: 8  
124 <211> LENGTH: 41  
125 <212> TYPE: PRT  
126 <213> ORGANISM: peptide  
128 <400> SEQUENCE: 8  
129 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
130 1 5 10 15  
131 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys  
132 20 25 30  
133 Ile Pro Ser Asp Phe Glu Arg Gly Asp  
134 35 40  
136 <210> SEQ ID NO: 9  
137 <211> LENGTH: 27  
138 <212> TYPE: PRT  
139 <213> ORGANISM: peptide  
141 <400> SEQUENCE: 9  
142 Arg Gly Asp Leu Lys His Leu Ser Lys Val Lys Lys Ile Pro Ser Asp  
143 1 5 10 15  
144 Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu  
145 20 25  
147 <210> SEQ ID NO: 10  
148 <211> LENGTH: 38  
149 <212> TYPE: PRT  
150 <213> ORGANISM: peptide  
152 <400> SEQUENCE: 10  
153 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
154 1 5 10 15  
155 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys  
156 20 25 30  
157 Ile Pro Ser Arg Gly Asp  
158 35  
160 <210> SEQ ID NO: 11  
161 <211> LENGTH: 24  
162 <212> TYPE: PRT  
163 <213> ORGANISM: peptide  
165 <400> SEQUENCE: 11  
166 Arg Gly Asp Leu Ser Lys Val Lys Lys Ile Pro Ser Asp Phe Glu Gly  
167 1 5 10 15  
168 Ser Gly Tyr Thr Asp Leu Gln Glu  
169 20  
171 <210> SEQ ID NO: 12  
172 <211> LENGTH: 32  
173 <212> TYPE: PRT  
174 <213> ORGANISM: peptide  
176 <400> SEQUENCE: 12  
177 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
178 1 5 10 15  
179 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Arg Gly Asp  
180 20 25 30

## RAW SEQUENCE LISTING

DATE: 04/05/2001

PATENT APPLICATION: US/09/812,485

TIME: 12:12:58

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04052001\I812485.raw

182 <210> SEQ ID NO: 13  
183 <211> LENGTH: 21  
184 <212> TYPE: PRT  
185 <213> ORGANISM: peptide  
187 <400> SEQUENCE: 13  
188 Arg Gly Asp Val Lys Lys Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr  
189 1 5 10 15  
190 Thr Asp Leu Gln Glu  
191 20  
193 <210> SEQ ID NO: 14  
194 <211> LENGTH: 28  
195 <212> TYPE: PRT  
196 <213> ORGANISM: peptide  
198 <400> SEQUENCE: 14  
199 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
200 1 5 10 15  
201 Ile Gln His Asn Ile Asp Tyr Leu Lys Arg Gly Asp  
202 20 25  
204 <210> SEQ ID NO: 15  
205 <211> LENGTH: 18  
206 <212> TYPE: PRT  
207 <213> ORGANISM: peptide  
209 <400> SEQUENCE: 15  
210 Arg Gly Asp Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu  
211 1 5 10 15  
212 Gln Glu  
215 <210> SEQ ID NO: 16  
216 <211> LENGTH: 25  
217 <212> TYPE: PRT  
218 <213> ORGANISM: peptide  
220 <400> SEQUENCE: 16  
221 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
222 1 5 10 15  
223 Ile Gln His Asn Ile Asp Arg Gly Asp  
224 20 25  
226 <210> SEQ ID NO: 17  
227 <211> LENGTH: 15  
228 <212> TYPE: PRT  
229 <213> ORGANISM: peptide  
231 <400> SEQUENCE: 17  
232 Arg Gly Asp Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu  
233 1 5 10 15  
235 <210> SEQ ID NO: 18  
236 <211> LENGTH: 19  
237 <212> TYPE: PRT  
238 <213> ORGANISM: peptide  
240 <400> SEQUENCE: 18  
241 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg  
242 1 5 10 15

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/812,485

DATE: 04/05/2001  
TIME: 12:12:58

Input Set : A:\seqlist.txt  
Output Set: N:\CRF3\04052001\I812485.raw

243 Arg Gly Asp  
246 <210> SEQ ID NO: 19  
247 <211> LENGTH: 12  
248 <212> TYPE: PRT  
249 <213> ORGANISM: peptide  
251 <400> SEQUENCE: 19  
252 Arg Gly Asp Gly Ser Gly Tyr Thr Asp Leu Gln Glu  
253 1 5 10  
255 <210> SEQ ID NO: 20  
256 <211> LENGTH: 13  
257 <212> TYPE: PRT  
258 <213> ORGANISM: peptide  
260 <400> SEQUENCE: 20  
261 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Arg Gly Asp  
262 1 5 10  
264 <210> SEQ ID NO: 21  
265 <211> LENGTH: 9  
266 <212> TYPE: PRT  
267 <213> ORGANISM: peptide  
269 <400> SEQUENCE: 21  
270 Arg Gly Asp Gly Tyr Thr Asp Leu Gln  
271 1 5  
273 <210> SEQ ID NO: 22  
274 <211> LENGTH: 10  
275 <212> TYPE: PRT  
276 <213> ORGANISM: peptide  
278 <400> SEQUENCE: 22  
279 Asp Ser Gln Ala Gln Lys Ser Arg Gly Asp  
280 1 5 10  
282 <210> SEQ ID NO: 23  
283 <211> LENGTH: 40  
284 <212> TYPE: PRT  
285 <213> ORGANISM: peptide  
287 <400> SEQUENCE: 23  
288 Arg Gly Asp Asn Asp Ile Ser Pro Phe Ser Gly Asp Gly Gln Pro Phe  
289 1 5 10 15  
290 Lys Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Pro Asp Leu Glu Gly  
291 20 25 30  
292 Lys Asp Ile Gln Thr Gly Phe Ala  
293 35 40  
295 <210> SEQ ID NO: 24  
296 <211> LENGTH: 40  
297 <212> TYPE: PRT  
298 <213> ORGANISM: peptide  
300 <400> SEQUENCE: 24  
301 Asn Asp Ile Arg Gly Asp Ser Pro Phe Ser Gly Asp Gly Gln Pro Phe  
302 1 5 10 15  
303 Lys Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Pro Asp Leu Glu Gly  
304 20 25 30

*Please correct this error in subsequent sequences*  
*too*

*PSI*

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is present in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/812,485

DATE: 04/05/2001

TIME: 12:12:59

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04052001\I812485.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number

L:521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43

L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50